

MODELS: Beechcraft D18C-T, 10 PCLM

T.C. NUMBER: 770 (Approved 6/3/47)

Engines	2 Continentals R9-A
Fuel	91 minimum octane aviation gasoline
Engine limits	Maximum continuous, (S.L.) 41.5 in. Hg., 2300 rpm (500 hp); (Straight line manifold pressure variation with altitude to 4000 ft.) 40.0 in. Hg , 2300 rpm (500 hp); Take-off (two minutes) 43 in. Hg., 2800 rpm (525 hp)
Airspeed limits	Maneuvering 135 mph True Ind. Cruising 205 mph True Ind. Never exceed 256 mph True Ind. Flaps extended 120 mph True Ind. Landing gear extended 134 mph True Ind.
C.G. range	(+109.8) to (+117.7) at 9000 lbs., (+105.0) to (+117.7) at 7600 lbs. or less. Straight line variation between points given. Range is with landing gear extended. Retraction of gear yields +11.783 in. lb.
Leveling means	Leveling lugs on top of fuselage, forward of cabin door
Datum	Nose of fuselage, most forward point 102 inches forward of centerline of main wing spar (placard denoting datum installed on bottom of fuselage).
Maximum weights	Landing 9,000 lbs.; take-off 9,000 lbs.
No. seats	Maximum 10
Maximum baggage	Nose compartment: 600 lbs. (+28). When 47 gallon auxiliary fuel tank is installed, combined weight of fuel and baggage must not exceed 600 lbs. (+28). Rear compartment: 500 lbs. (+243). When chemical toilet is installed capacity reduced to 300 lbs. (+243). When 2-place folding seat (Item 402) is installed and occupied, capacity reduced to 200 lbs. (+252). See Item 403 for cabin rack.
Fuel capacity	202 gallons usable (four tanks in wings, two 76 gallon tanks at +126 and two 25 gallon tanks at +155). See NOTE 1 for System Fuel & Oil.
Oil capacity	17 gallons (8-1/2 gallon tank in each nacelle at +93). Included propeller feathering oil, 9-1/2 lbs. each tank. See NOTE 1 for System Fuel & Oil.
Anti-Icer fluid	

capacity:	3 gallons (20 lbs.) (+97)	
Control surface movements	Wing flaps	Down 25 degrees
	Elevator trim tab	Up 20 degrees Down 14 degrees
	Elevator	Up 35 degrees Down 25 degrees
	Aileron trim tab	Up 20 degrees Down 20 degrees
	Aileron	Up 37.5 degrees Down 20 degrees
	Rudder trim tab	Right 30 degrees Left 30 degrees
	Rudder	Right 25 degrees Left 25 degrees
Serial Nos. eligible	AA-1 thru AA-13 and AA-16, AA-17 and AA-18 manufactured prior to 10/1/47. Approval expired as of that date.	
Required equipment	Items 1, 101, 102, 103, 104, 106, 108, 109, 201, 202, 301, 302, 303, 304, 404 and 406	
Specifications Pertinent to All Models		
Certification basis	Type Certificate No. 770, expired. (Although certificated on basis CAR 4a, Transport Category design complies with CAR 4b except for non- compliance with CAR 4b.2141.)	
Export eligibility	Eligible for export to all countries subject to the provisions of MOP 2-4.	

EQUIPMENT:

Propellers and Propeller Accessories (Except De-Icing Equipment)

1. Hamilton Standard hyd. full feathering
 - (a) Hubs 22D30, blades 6597A-21 or -22.
Diameter 8' 3-1/8" maximum,
8' 1-1/8" minimum. For inter-
changeable blade models see Prop.
Spec. No. 736 (NOTE 6). Pitch
settings: High 86 degrees, low 16
degrees, at Station 42. Placard
required: "Avoid continuous
operation between 1850 and
2000 rpm." 176 lbs. each (+30)
 - (b) Governor, Hamilton Standard
4G8 P30M 7 lbs. each (+38)
 - (c) Feathering pump, Hamilton Standard
66094-1 or 59664-11 (both modified
by Beech) 11 lbs. each (+103)

Engine and Engine Accessories - Fuel and Oil Systems

101. Two 7"x9" oil radiators with air
intake system 20 lbs. each (+80)
102. Two wobble fuel pumps: 4 lbs. each (+86)
 - (a) United Aircraft U-550-BE; or
 - (b) United Aircraft U-550-B0; or
 - (c) Romec Pump Co. RAD-1563-1; or
 - (d) Army Type D-11
 and
Two engine-driven fuel pumps: 3 lbs. each (+61)
 - (e) Army Type G6; or
 - (f) AN-4100-1; or
 - (g) Romec RD-3890; or
 - (h) Pesco 2P-R400-BRD; or
 - (i) Pesco 2P-R400-BRB; or
 - (j) Pesco 2P-R400-BR; or
 - (k) Chandler Evans 9141; or
 - (l) Chandler Evans 9105; or
 - (m) Chandler Hill H2E3; or
 - (n) Thompson TFD-400-1; or
 - (o) Thompson TFD-400; or
 - (p) Thompson TFD-900-1
103. Two carburetor air heaters (weight and
arm are for one set of heater muff) 9 lbs. each (+59)
104. Two oil radiator by-pass valves - S80 1 lb. each (+79)
105. Exhaust collector gas analyzer -
Cambridge No. 10555-1 10 lbs. each (+77)
106. Two vacuum pumps. All of the following
pumps are satisfactory for installation
using up to 3 air-driven instruments. 5 lbs. each (+65)
 - (a) Army Type B-12; or
 - (b) Eclipse Pioneer 683-3; or
 - (c) Eclipse Pioneer 683-4; or
 - (d) Eclipse Pioneer 549-5; or
 - (e) Pesco 3P-207-JA; or
 - (f) Pesco 3P-207-J; or
 - (g) Aro Equipment 207-JA; or
 - (h) Aro Equipment A-505-DD
(satisfactory for installations
using up to 5 air-driven instru-

	ments); or		
	(i) Romec RD-3880		
107.	Starters - Eclipse E-80 or Army Type J-1	20 lbs. each (+	
108.	Carburetor air filters	2 lbs. each (+	
109.	Engine compartment pressure fire extinguisher and system (including detector system) with two Walter Kidde 5 lb. CO2	57 lbs.	(
110.	Two oil dilution system	1 lb. each (+)	
111.	47 gallon auxiliary fuel tank in nose compartment. When this item is installed, the combined weight of fuel and baggage shall not exceed 600 lbs. (+28)	45 lbs.	(
112.	Engine cooling air outlet baffles. Installation in accordance with Continental Motors Drawing No. 516935	1 lb.	(
Landing Gear			
201.	11.00-12 main wheels -- Goodyear L12HBM-wheel assembly No. 530884; brake assembly No. 630886; 11.00-12 8-ply tires and tubes	95 lbs. each	
202.	14.50 tail wheel (Hayes or Goodrich D-3-180M) with 6-ply S.C. tire and tube	14 lbs.	
203.	Hand operated parking brakes	3 lbs.	
Electrical Equipment			
301.	Two generators - Eclipse Type 1298-1-75 amp	23 lbs. each (+	
302.	Two batteries - 24 volt (17 amp hr. min.)	49 lbs. each (+	
303.	Wing flap motor (a) Dumore Type KL-5227; or (b) Dumore Type KBL-5367; or (c) Lamb Electric Type 39V; or (d) Black and Decker or Lamb Electric Type CS No. IS 13820	5 lbs.	
304.	Landing gear motor - Electric Specialty Type HCA3, modified, or Leland Electric Co. 10559	14 lbs.	
305.	Two landing lights (Grimes G-3001)	7 lbs. each (+	
Interior Equipment			
401.	Chemical toilet. Placard required on lavatory door: "This room not to be occupied during take-off and landing." When this item is installed, rear baggage is reduced to 300 lb. (+243).	7 lbs.	
402.	2-place folding seat in bulkhead No. 9. When this item is installed, rear baggage allowance must be reduced to 200 lbs. (+252).	33 lbs.	
403.	Pass. cabin baggage rack and tiedown provision installation (maximum baggage allowance 400 lbs.)	6 lbs.	
404.	Windshield wiper - Marquette with 10 in. blades	11 lbs.	
405.	Control system lock	1 lb.	
406.	CAA Approved Airplane Flight Manual (original nomenclature "CAA Approved Airplane Operating Manual") and pertinent revisions applicable to the particular serial No. (The manual may be carried as part of, or bound with the operator's "Approved Operations Manual", but must remain in the airplane and must retain its identity as an individual manual.)		
407.	Retractable entry step per "Installation Procedure and Drawing 62149 and 62150" for kit installation by the Reed Co., Municipal Airport, 3200 Dewey Street, Santa Monica, CA		
	Flite Step	9.5 lbs.	
	Power Unit	5.5 lbs.	
De-Icing Equipment (Propellers, Wing, and Windshield)			
501.	Surface de-icer - Goodrich Type 2,		

Model 270			
(a)	Two wing boots (removable)	14 lbs. each	(+108)
(b)	Two stabilizer boots (removable)	5 lbs. each	(+350)
(c)	De-icer installation (fixed portion)	41 lbs.	(+117)
502.	Propeller anti-icer		
(a)	3 gallon fluid tank, pump and lines	11 lbs.	(+85)
(b)	Two slinger rings - Hamilton Standard 54884C or 54751D or Beech Co. 69206	1 lb. each	(+35)

NOTE 1. Current weight and balance report including list of equipment included in certificated weight empty, and loading instructions when necessary, must be in each aircraft at the time of original certification and at all times thereafter (except in the case of air carrier operators having an approved weight control system).

The certificated weight empty and corresponding C.G. location must include the system fuel and oil:

Fuel 24 lb. at (+131) (not included in "Fuel Capacity").
Oil 43 lb. at (+70) (includes propeller feathering oil of 9.5 lbs. each tank).

NOTE 2. The following placards must be displayed:

- (a) Instrument panel in full view of the pilots:
 - (1) "This airplane must be operated in compliance with the operating limitations specified in CAA Approved Airplane Operating Manual."
 - (2) "All intentional acrobatic maneuvers prohibited."
 - (3) "Avoid continuous operation between 1,850 and 2,000 rpm" (Tachometer must be marked accordingly).
- (b) Lavatory door: "This room not to be occupied during take-off and landing."